## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

Claims 1-48 (cancelled)

49. (previously presented) A compound of the formula (I):

wherein:

R<sup>2</sup> is hydrogen;

R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR<sup>11</sup>R<sup>12</sup> where R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R<sup>11</sup> and R<sup>12</sup> together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are hydrogen; or

R<sup>3</sup> and R<sup>4</sup>, R<sup>4</sup> and R<sup>5</sup>, or R<sup>5</sup> and R<sup>6</sup> combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R<sup>7</sup> is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R<sup>8</sup> and R<sup>10</sup> are unsubstituted lower alkyl;

R<sup>9</sup> is 2-(dimethylaminoethyl)aminocarbonyl, 2-(diethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl;

R1' is hydrogen or alkyl; and

R<sup>2'</sup> is hydrogen, alkyl, aralkyl, acyl or -P(O)(OR)(OR') where R and R' are independently selected from the group consisting of hydrogen, alkyl, aralkyl or aryl; or a pharmaceutically acceptable salt thereof.

- 50. (previously presented) The compound of claim 49, wherein R<sup>8</sup> and R<sup>10</sup> are each independently methyl.
- 51. (previously presented) The compound of claim 49, wherein  $R^2$  is hydrogen, acyl or -P(O)(OR)(OR') and  $R^7$  is hydrogen;

R<sup>3</sup> is hydrogen or lower unsubstituted alkyl;

R<sup>4</sup> is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R<sup>5</sup> is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and

R<sup>6</sup> is hydrogen.

- 52. (previously presented) The compound of claim 51, wherein R<sup>3</sup> is hydrogen or methyl.
- 53. (previously presented) The compound of claim 51, wherein R<sup>4</sup> is hydrogen, chloro, fluoro, bromo or phenyl.
- 54. (previously presented) The compound of claim 53, wherein R<sup>4</sup> is hydrogen or fluoro.
- 55. (previously presented) The compound of claim 51, wherein R<sup>5</sup> is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.
- 56. (previously presented) The compound of claim 55, wherein R<sup>5</sup> is hydrogen.
- 57. (previously presented) The compound of claim 49, wherein R<sup>2'</sup> is hydrogen.
- 58. (previously presented) The compound of claim 49, wherein R<sup>2'</sup> is -P(O)(OR)(OR').
- 59. (previously presented) The compound of claim 49, wherein R<sup>2'</sup> is acyl.
- 60. (previously presented) A compound of the formula (II):

wherein:

R<sup>2</sup> is hydrogen;

R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR<sup>11</sup>R<sup>12</sup> where R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R<sup>11</sup> and R<sup>12</sup> together with the nitrogen

atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are hydrogen; or

 $R^3$  and  $R^4$ ,  $R^4$  and  $R^5$ , or  $R^5$  and  $R^6$  combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R<sup>7</sup> is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R<sup>8</sup> and R<sup>10</sup> are independently unsubstituted lower alkyl;

 $R^9$  is  $-C(=O)NHR^{13}$  wherein  $R^{13}$  is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxy;

R1' is hydrogen or alkyl; and

R<sup>3'</sup> and R<sup>4'</sup> are independently alkyl or together with the nitrogen atom to which they are attached combine to form a heteroalicyclic ring or a heteroaryl ring; or a pharmaceutically acceptable salt thereof.

- 61. (previously presented) The compound of claim 60, wherein R<sup>9</sup> is (2-diethylaminoethyl)-aminocarbonyl, (2-ethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)-aminocarbonyl, 3-(morpholin-4-yl)propyl-aminocarbonyl, or 3-(morpholin-4-yl)-2-hydroxypropylaminocarbonyl.
- 62. (previously presented) The compound of claim 61, wherein R<sup>9</sup> is (2-diethylaminoethyl)aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.
- 63. (previously presented) A compound of the formula II:

$$R^4$$
 $R^5$ 
 $R^6$ 
 $R^{10}$ 
 $R^9$ 
 $R^8$ 
 $R^7$ 
 $R^7$ 
 $R^8$ 

wherein:

R<sup>3</sup> is hydrogen or lower unsubstituted alkyl;

R<sup>4</sup> is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido,

R<sup>5</sup> is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl;

R<sup>6</sup> is hydrogen;

R<sup>7</sup> is hydrogen;

R1' is hydrogen or methyl

 $\ensuremath{\text{R}^{8}}$  and  $\ensuremath{\text{R}^{10}}$  are independently unsubstituted lower alkyl;

R<sup>9</sup> is -C(=O)NHR<sup>13</sup> wherein R<sup>13</sup> is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxy; and

R<sup>3'</sup> and R<sup>4'</sup> are independently lower alkyl optionally substituted with hydroxy, or

 $R^{3'}$  and  $R^{4'}$  together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxy-pyrrolidin-1-yl, piperazin-1-yl, or 4-methylpiperazin-1-yl group; or

 $R^{3'}$  and  $R^{4'}$  together with the nitrogen atom to which they are attached form a heteroaryl ring; or a pharmaceutically acceptable salt thereof.

- 64. (previously presented) The compound of claim 63, wherein  $R^{3'}$  and  $R^{4'}$  are lower alkyl optionally substituted with hydroxyl.
- 65. (previously presented) The compound of claim 63, wherein R<sup>3'</sup> and R<sup>4'</sup> together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxy-pyrrolidin-1-yl, piperazin-1-yl, or a 4-methylpiperazin-1-yl group.
- 66. (previously presented) The compound of claim 65, wherein R<sup>3'</sup> and R<sup>4'</sup> together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl group.
- 67. (previously presented) The compound of claim 63, wherein R<sup>3'</sup> and R<sup>4'</sup> together with the nitrogen atom to which they are attached form a pyrro-1-yl, pyridin-1-yl, oxazol-3-yl, isoxazol-2-yl, pyrazin-1-yl, pyradizin-1-yl, quinolin-1-yl, or a imidazol-1-yl heteroaryl ring.
- 68. (previously presented) The compound of claim 67, wherein R<sup>3'</sup> and R<sup>4'</sup> together with the nitrogen atom to which they are attached form a pyridin-1-yl ring.
- 69. (previously presented) The compound of claim 63, wherein R<sup>3</sup> is hydrogen or methyl.
- 70. (previously presented) The compound of claim 63, wherein R<sup>4</sup> is hydrogen, chloro, fluoro, bromo or phenyl.
- 71. (previously presented) The compound of claim 70, wherein R<sup>4</sup> is hydrogen or fluoro.
- 72. (previously presented) The compound of claim 63, wherein R<sup>5</sup> is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.
- 73. (previously presented) The compound of claim 72, wherein R<sup>5</sup> is hydrogen.
- 74. (previously presented) The compound of claim 63, wherein:

R<sup>1</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, and R<sup>7</sup> are hydrogen;

R<sup>4</sup> is halo;

, R', R', and R' ale hydrogi

R<sup>8</sup> and R<sup>10</sup> are unsubstituted lower alkyl;

 $R^9$  is  $-C(=O)NHR^{13}$  wherein  $R^{13}$  is lower alkyl substituted with amino or heteroalicyclic and optionally substituted with hydroxyl; and

 $R^{3'}$  and  $R^{4'}$  together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, 2-(S)-hydroxymethylpyrrolidin-1-yl, 2-(S)-carboxypyrrolidin-1-yl, piperazin-1-yl, or a 4-methylpiperazin-1-yl group.

- (previously presented) The compound of claim 74, wherein R<sup>9</sup> is (2-diethylaminoethyl)-aminocarbonyl, (2-ethylaminoethyl)-aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, 3-(morpholin-4-yl)propyl-aminocarbonyl, 3-(morpholin-4-yl)-2-hydroxypropylaminocarbonyl, particularly (2-diethylaminoethyl)aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.
- 76. (previously presented) The compound of claim 75, wherein R<sup>9</sup> is (2-diethylaminoethyl) aminocarbonyl, or (2-ethylaminoethyl)-aminocarbonyl.
- 77. (previously presented) The compound of claim 75, wherein R<sup>3'</sup> and R<sup>4'</sup> together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl group.
- 78. (previously presented) The compound of claim 63, which is (3Z)-3-{[3,5-dimethyl-4-(2-diethylaminoethylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene}-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one; (3Z)-3-{[3,5-dimethyl-4-(2-ethylaminoethylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene}-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one; or (3Z)-3-{[3,5-dimethyl-4-(3-morpholin-4-yl-2-hydroxypropylaminocarbonyl)-1H-pyrrol-2-yl]-methylidene}-1-(1-pyrrolidinylmethyl)-1,3-dihydro-2H-indol-2-one.
- 79. (previously presented) A compound of the formula III:

$$R^{10}$$
 $R^{9}$ 
 $R^{8}$ 
 $R^{7}$ 
 $R^{5}$ 
 $R^{6}$ 
 $R^{5}$ 

wherein:

R<sup>2</sup> is hydrogen;

R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR<sup>11</sup>R<sup>12</sup> where R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl, or R<sup>11</sup> and R<sup>12</sup> together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are hydrogen; or

R<sup>3</sup> and R<sup>4</sup>, R<sup>4</sup> and R<sup>5</sup>, or R<sup>5</sup> and R<sup>6</sup> combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R<sup>7</sup> is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R<sup>8</sup> and R<sup>10</sup> are unsubstituted lower alkyl;

R9 is C-amido; and

R<sup>5'</sup> is alkyl; or

a pharmaceutically acceptable salt thereof.

- 80. (previously presented) The compound of claim 79, wherein R<sup>9</sup> is 2-(dimethylaminoethyl) aminocarbonyl, 2-(diethylaminoethyl) aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl.
- 81. (previously presented) The compound of claim 79, wherein

R<sup>3</sup> is hydrogen or lower unsubstituted alkyl;

R<sup>4</sup> is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R<sup>5</sup> is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and

R<sup>6</sup> and R<sup>7</sup> are hydrogen.

- 82. (previously presented) The compound of claim 79, wherein R<sup>3</sup> is hydrogen or methyl.
- 83. (previously presented) The compound of claim 79, wherein R<sup>4</sup> is hydrogen, chloro, fluoro, bromo or phenyl.
- 84. (previously presented) The compound of claim 83, wherein R<sup>4</sup> is hydrogen or fluoro.
- 85. (previously presented) The compound of claim 79, wherein R<sup>5</sup> is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.
- 86. (previously presented) The compound of claim 85, wherein R<sup>5</sup> is hydrogen.
- 87. (previously presented) A compound of the formula IV:

$$R^{10}$$
 $R^{9}$ 
 $R^{8}$ 
 $R^{2}$ 
 $R^{7}$ 
 $R^{5}$ 
 $R^{6}$ 
 $PO(OR^{a})(OR^{b})$ 

wherein:

R<sup>2</sup> is hydrogen;

R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy,

aryloxy, mercapto, alkylthio, arylthio, sulfinyl, sulfonyl, S-sulfonamido, N-sulfonamido, trihalomethane-sulfonamido, carbonyl, C-carboxy, O-carboxy, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, amino and -NR<sup>11</sup>R<sup>12</sup> where R<sup>11</sup> and R<sup>12</sup> are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, acetyl, sulfonyl, and trifluoromethanesulfonyl or R<sup>11</sup> and R<sup>12</sup> together with the nitrogen atom to which they are attached combine to form a five- or six-membered heteroalicyclic ring provided that at least two of R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> are hydrogen; or

 $R^3$  and  $R^4$ ,  $R^4$  and  $R^5$ , or  $R^5$  and  $R^6$  combine to form a six-membered aryl ring, a methylenedioxy or an ethylenedioxy group;

R<sup>7</sup> is selected from the group consisting of hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, carbonyl, acetyl, C-amido, C-thioamido, amidino, C-carboxy, O-carboxy, sulfonyl and trihalomethane-sulfonyl;

R<sup>8</sup> and R<sup>10</sup> are unsubstituted lower alkyl;

R9 is C-amido; and

R<sup>a</sup> and R<sup>b</sup> are independently selected from hydrogen or alkyl; or a pharmaceutically acceptable salt thereof.

- 88. (previously presented) The compound of claim 87, wherein R<sup>9</sup> is 2-(dimethylaminoethyl) aminocarbonyl, 2-(diethylaminoethyl)aminocarbonyl, 2-(pyrrolidin-1-ylethyl)aminocarbonyl, or 2-(morpholin-4-ylethyl)aminocarbonyl.
- 89. (previously presented) The compound of claim 87, wherein

R<sup>3</sup> is hydrogen or lower unsubstituted alkyl;

R<sup>4</sup> is selected from the group consisting of hydrogen, halogen, aryl and S-sulfonamido;

R<sup>5</sup> is selected from the group consisting of hydrogen, lower alkyl, lower alkoxy, aryl, and heteroaryl; and

R<sup>6</sup> and R<sup>7</sup> are hydrogen.

- 90. (previously presented) The compound of claim 87, wherein R<sup>3</sup> is hydrogen or methyl.
- 91. (previously presented) The compound of claim 87, wherein R<sup>4</sup> is hydrogen, chloro, fluoro, bromo or phenyl.
- 92. (previously presented) The compound of claim 90, wherein R<sup>4</sup> is hydrogen or fluoro.
- 93. (previously presented) The compound of claim 87, wherein R<sup>5</sup> is hydrogen, methyl, ethyl, methoxy, phenyl or pyridyl.
- 94. (previously presented) The compound of claim 93, wherein R<sup>5</sup> is hydrogen.
- 95. (previously presented) The compound of claim 87, wherein R<sup>a</sup> and R<sup>b</sup> are hydrogen.
- 96. (previously presented) A pharmaceutical composition comprising a compound of any one of claims 49, 60, 63, 79 or 87 and a pharmaceutically acceptable carrier.
- 97. (previously presented) A pharmaceutical composition comprising a compound of claim 78 and a pharmaceutically acceptable carrier.

- 98. (previously presented) The pharmaceutical composition of claim 97, wherein said composition is administered orally.
- 99. (previously presented) The pharmaceutical composition of 97, wherein said composition is administered parenterally.

Claims 100-106 (cancelled)

- 107. (previously presented) A method of synthesizing a compound of formula I comprising:
  - (a) reacting a compound of the formula V:

where  $R^3 - R^{10}$  are as defined in claim 49, with an aldehyde of the formula  $R^1$  CHO, where  $R^1$  is as defined in claim 49, in the presence of an organic base, to provide a compound of formula I where  $R^2$  is hydrogen;

- (b) optionally reacting a compound obtained in step (a) above with an alkylating agent, an aralkylating agent, an acylating agent or a phosphorylating agent in the presence of an organic base to provide a compound of formula I where R<sup>2'</sup> is alkyl, aralkyl, aryl, acyl or -P(O)(OR)(OR');
  - (c) optionally removing a protecting group from the product of step (b); and
  - (d) optionally forming an acid addition salt.
- 108. (previously presented) A method of synthesizing a compound of formula III comprising:
  - (a) reacting a compound of the formula V:

$$R^{10}$$
 $R^{9}$ 
 $R^{8}$ 
 $R^{2}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{5}$ 
 $R^{6}$ 

where  $R^3 - R^{10}$  are as defined in claim 79, with an acylating agent of the formula  $R^{5'}COL$ , where  $R^{5'}$  is as defined in claim 79 and L is a leaving group, under acylating reaction conditions, in the presence of an organic base;

(b) optionally removing a protecting group from the product of step (b); and

- (c) optionally forming an acid addition salt.
- 109. (previously presented) A method of synthesizing a compound of formula IV comprising:
  - (a) reacting a compound of the formula V:

$$R^4$$
 $R^5$ 
 $R^6$ 
 $R^9$ 
 $R^9$ 
 $R^8$ 
 $R^7$ 
 $R^7$ 

where  $R^3 - R^{10}$  are as defined in claim 87 above, with a phosphorylating agent of the formula  $XP(O)(OR^a)(R^b)$ , where  $R^a$  and  $R^b$  are alkyl and X is a leaving group under phosphorlating reaction conditions in the presence of an organic base;

- (b) optionally removing the R<sup>a</sup> and R<sup>b</sup> groups;
- (c) optionally removing a protecting group from the product of step (b); and
- (d) optionally forming an acid addition or base salt.